



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I-NEW ENGLAND
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

URGENT MATTER - PROMPT REPLY NECESSARY
CERTIFIED MAIL - RETURN RECEIPT REQUESTED

FEB 10 2016

Mr. John Michael Lyons, Regulatory Affairs Manager
Cytec Industries Inc.
1937 West Main Street
Stamford, CT 06902

Re: **NOTICE OF VIOLATION** of the applicable Generators Standards of Hazardous Waste, Section 3002 of the Resource Conservation and Recovery Act of 1976 (RCRA) and the Hazardous and Solid Waste Amendments (HSWA) of 1984, 42 U.S.C. §§ 6622(a) and 6924(d) through (m) and the Regulations of Connecticut State Agencies (RCSA):22a-449(c)-102 and 22a-449(c)-119.

Dear Mr. Lyons:

On September 9, 2014, representatives of the United States Environmental Protection Agency ("EPA") conducted a RCRA Compliance Evaluation Inspection. The purpose of this inspection was to determine the compliance of Cytec Industries Inc., EPA ID No. CTD001864024 with Connecticut Hazardous Waste Regulations RCSA 22a-449(c)-102 and 22a-449(c)-108 and the federal Hazardous Waste Management Regulations found at 40 CFR Parts 260-272. The State of Connecticut has been granted final authorization by EPA to administer certain portions of RCRA.

As a result of the inspection noted above, EPA has determined that your facility violated certain provisions of the Connecticut Hazardous Waste Regulations and the RCRA regulations, promulgated at 40 CFR Parts 260 through 272. The specific violations are set forth below:

1. **Failure to mark the date upon which each period of accumulation begins is clearly marked and visible for inspection on each container, as required by 40 CFR 262.34(a)(2) and RCSA 22a-449(c)-102(a)(1)**

Specifically, the following containers were not clearly marked with the beginning accumulation date, as required by RCSA 22a-449(c)-102(a)(1):

Table 1- Less-than 90-day storage area

Size	Label/Marking/Waste Accumulated	Date
1 30-gallon	Hazardous Waste, toxic, chloroform/butanol, melamine, formaldehyde	¹
1 30-gallon	Hazardous Waste, oxidizer, D001 ²	
1 15-gallon	Hazardous Waste, toxic cyanide salts, sodium cyanide aqueous solution, P105, D003	
1 5-gallon	Hazardous Waste, corrosive, alkaline, D002	
4 55-gallon	Hazardous Waste, ³	
1 55-gallon	Hazardous Waste, toxic, glyphosate, glyoxal, CR04, CR05	
1 20-gallon	Hazardous Waste, ignitable, corrosive, flammable, alkaline mix, D001, D002	
1 5-gallon	Hazardous Waste, treated Bayer liquor waste with HCL from TOC analyzer with vials and cups	
1 5-gallon	Hazardous Waste, sodium hydroxide, sodium aluminate, water	

2. **Failure to maintain adequate aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of facility operation, in an emergency, as required by RCSA 22a-449(c)-102(a)(2)(E), which incorporates by reference 40 CFR 262.34(a)(1)(i), 40 CFR 264.35 and 40 CFR 264.175.**

At the time of the inspection, there was not adequate aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of facility operation, in an emergency for 40 of the 45 containers stored in the less-than 90-day storage area; eighteen, 5-gallon containers with bases and eleven, 5-gallon containers with acids were stored double-height on the same spill pallet. ⁴ The less-than 90-day storage area was crowded; there was not enough aisle space for the inspectors to get close enough to be able to read all of the hazardous waste labels on the containers, as required by RCSA 22a-449(c)-102(a)(2)(E), which incorporates by reference 40 CFR 262.34(a)(1)(i), 40 CFR 264.35 and 40 CFR 264.175.

3. **Failure to prevent accidental ignition or reaction of ignitable or reactive waste, as required by RCSA 22a-449(c)-102(a)(2) K, which incorporates by reference 40 CFR 262.34(a)(4) and 265.17(a).**

¹ The hazardous waste label had no date.

² The inspection team could not read the full label since the label was not facing out.

³ The inspection team could not see labels of these containers since there was not enough aisle space.

⁴ The facility moved these containers so the inspectors could read and take photographs of the hazardous waste labels.

Specifically, the Cytec Industries Inc. failed to prevent accidental ignition or reaction of ignitable or reactive waste for the following containers located in the less-than 90-day storage area, as required by RCSA 22a-449(c)-102(a)(2) K, which incorporates by reference 40 CFR 262.34(a)(4) and 265.17(a):
One, ungrounded, 55-gallon container labeled, Hazardous waste, mixed solvents, 8/01/14.

4. **Failure to store containers of hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device, as required by RCSA 22a-449(c)-102(a)(1), which incorporates by reference 40 CFR 265.177(c).**

Specifically, the Cytec Industries Inc. failed to store the following containers of hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device, as required by RCSA 22a-449(c)-102(a)(1), which incorporates by reference 40 CFR 265.177(c):

Eighteen, 5-gallon containers bases and eleven, 5-gallon containers acids were stored double-height on the same spill pallet, detailed in Table 2 below, without regard to separating incompatibles wastes.

Table 2- Less-than 90-day storage area

Size	Label/Marking/Waste Accumulated	Date
1 5-gallon	Hazardous Waste, sodium hydroxide, sodium aluminate, Bayer liquid and red mud	Start date 06/17/14
5 5-gallon	Hazardous Waste, 80% liquid waste/water acetone, kerosene, 20% paper/plastic/glass, pH<2	06/27/14, 06/12/14, 04/29/14, 07/07/14
1 5-gallon	Hazardous Waste, treated diluted Bayer liquor waste with HCL from TOC analyzer with vials and cups	No date
1 5-gallon	Hazardous Waste, sodium hydroxide, sodium aluminate, water	No date
1 5-gallon	Hazardous Waste, 80% liquid waste ammonia, acetone, 20 % glass plastic	06/27/14
1 5-gallon	Hazardous Waste, Bayer liquor titration waste ⁵	No date

⁵ The inspection team could not read the rest of the label.

1 5-gallon	Hazardous waste, ion chromatography waste, <50 mw potassium hydroxide, caustic	Start date 11/11/13
6 5-gallon	Hazardous Waste, Bayer liquor titration waste containing HCL, NiCL, sodium, pH>12.5	No dates
3 5-gallon	Hazardous Waste, Bayer liquor, pH >12.5	No dates
1 5-gallon	Hazardous Waste, treated dilute Bayer liquor with HCL from TOC	No date
1 5-gallon	Hazardous Waste, 80% water, ammonia, acetone, kerosene, 20% plastic/glass/paper	Start date 04/30/14
1 5-gallon	Hazardous Waste, Bayer liquor and red mud waste, NaOH and NA aluminate, base pH>12.5	No date
1 5-gallon	Hazardous Waste, Bayer liquor and red mud	No date
1 5-gallon	Hazardous Waste, acid, acetone, kerosene, pH<2	No date
1 5-gallon	Hazardous Waste aqueous aluminum chloride pH<2	04/18/2014
1 5-gallon	Hazardous Waste, premisolve, aqueous metals, acid, plastic waste, pH<2	Start date 12/19/13
1 5-gallon	Hazardous Waste, dilute acid waste, 10% HNO3, 5% H2SO4, 2% HCL, 1% HF, corrosive, pH<2	No date
1 5-gallon	Hazardous Waste, acid waste, solid waste 20% glass, plastic, paper	04/29/14

5. **Failure to accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status, as required by RCSA 22a-449(c)-102(a)(1), which incorporates by reference 40 CFR 262.34(a).**

Specifically, the following container was accumulated on site for more than 90 days without a permit or without having interim status as required by RCSA 22a-449(c)- 102(a)(1), which incorporates by reference 40 CFR 262.34(a):

In the flammable cabinet, located in the less-than 90-day storage area, there was one, 5-gallon container labeled, Hazardous waste, pyrophoric liquid, isobutyl phosphine, 01/08/13.

6. **Failure to label or mark each container accumulating hazardous waste on-site with the words "Hazardous waste" and other words that identify the contents such as chemical name, as required by RCSA 22a-449(c)-102(a)(2)(J) and 22a-449(c)-102(a)(2)(E).**

Specifically, at the time of the inspection, the following containers were not labeled or marked with the words, "Hazardous waste" and other words that

identify contents such as chemical name, as required by RCSA 22a-449(c)-102(a)(2)(J) and 22a-449(c)-102(a)(2)(E):

One, 1-gallon container, labeled as hazardous waste and with no other words that identify the contents, such as the chemical name, located under hood 41, in Room 218-Metal Extractions Products.

One, 1-liter container labeled as hazardous waste, located under hood 54 in the 217 Polymers Additives Laboratory. The label was difficult to read. According to John Michael Lyons, the container held dichloromethane.

Six, 5-gallon containers labeled, waste corrosive. These six containers were not labeled with the words "hazardous waste", located in Room 430-Mining and Minerals Engineering.

7. **Failure to maintain closed hazardous waste containers during storage, except when it is necessary to add or remove waste, as required by RCSA 22a-449(c)-102(a)(1), which incorporates by reference 40 CFR 262.34(a)(1) and 40 CFR 265.173(a).**

Specifically, the following hazardous waste containers were not closed at the time of the inspection, as required by RCSA 22a-449(c)-102(a)(1), which incorporates by reference 40 CFR 262.34(a)(1) and 40 CFR 265.173(a):

Three, 5-gallon containers labeled, hazardous waste, glassware, paper waste and solid waste, located in Room 218-Metal Extraction Products.

You are hereby required to:

1. Immediately upon receipt of this **NOTICE**:
 - a. Mark the date upon which each period of accumulation begins is clearly marked and visible for inspection on each container, as required by 40 CFR 262.34(a)(2) and RCSA 22a-449(c)-102(a)(1).
 - b. Maintain adequate aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of facility operation, in an emergency, as required by RCSA 22a-449(c)-102(a)(2)(E), which incorporates by reference 40 CFR 262.34(a)(1)(i), 40 CFR 264.35 and 40 CFR 264.175.

- c. Prevent accidental ignition or reaction of ignitable or reactive waste, as required by RCRA 22a-449(c)-102(a)(2) K, which incorporates by reference 40 CFR 262.34(a)(4) and 265.17(a).
- d. Store containers of hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device, as required by RCRA 22a-449(c)-102(a)(1), which incorporates by reference 40 CFR 265.177(c).
- e. Accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status, as required by RCRA 22a-449(c)-102(a)(1), which incorporates by reference 40 CFR 262.34(a).
- f. Label or mark each container accumulating hazardous waste on-site with the words "Hazardous waste" and other words that identify the contents such as chemical name, as required by RCRA 22a-449(c)-102(a)(2)(J) and 22a-449(c)-102(a)(2)(E).
- g. Maintain closed hazardous waste containers during storage, except when it is necessary to add or remove waste, as required by RCRA 22a-449(c)-102(a)(1), which incorporates by reference 40 CFR 262.34(a)(1) and 40 CFR 265.173(a).

2. Within (30) thirty calendar days of receipt of this **NOTICE**:

- a. Submit a written description, with supporting documentation, of the actions taken to correct the aforementioned violations to:

Linda Brolin, Environmental Engineer
U.S. Environmental Protection Agency
5 Post Office Square, Suite 100 (OES05-4)
Boston, MA 02109-3912

Failure to correct the violation as required by this **NOTICE** may subject the facility to further federal enforcement action, including the assessment of penalties, pursuant to Section 3008 of RCRA 42, U.S.C. § 6928.

If you have any questions regarding this **NOTICE**, please contact Linda Brolin, at (617) 918-1876.

Sincerely,

Mary Jane O'Donnell, Manager
RCRA, EPCRA, and Federal Programs Unit

cc: Joseph Schiavone, CT DEEP

